BALTIMORE METROPOLITAN PLANNING ORGANIZATION

BALTIMORE REGIONAL TRANSPORTATION BOARD RESOLUTION #21-22

AMENDMENT TO THE 2021 – 2024 BALTIMORE REGION TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Baltimore Regional Transportation Board is the designated Metropolitan Planning Organization for the Baltimore region, encompassing the Baltimore Urbanized Area, and includes official representatives of the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's as well as representatives of the Maryland Department of Transportation, the Maryland Department of the Environment, the Maryland Department of Planning, the Maryland Transit Administration, and Annapolis Transit; and

WHEREAS, the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the 2021-2024 Transportation Improvement Program for the Baltimore region at its August 25, 2020 meeting, with federal approval on October 19, 2020; and

WHEREAS, federal regulations require that all transportation-related projects must be listed in the approved Transportation Improvement Program with accurate funding schedules in order to be eligible for federal funding; and

WHEREAS, the Transportation Improvement Program consists of projects included in, and in support of, the region's long-range transportation plan and ongoing short-range planning efforts; and

WHEREAS, the Maryland Department of Transportation on behalf of the Maryland Transit Administration (MDOT MTA) has requested approval of an amendment to the 2021-2024 Transportation Improvement Program through the approved Transportation Improvement Program amendment process; and

WHEREAS, MDOT MTA is requesting to add a new project to the 2021-2024 TIP using an FTA Section 5312 Public Transportation Innovation discretionary grant. Grant funding will be used to develop, install, commission, and collect information surrounding a metro track intrusion system (see attachment); and

WHEREAS, the Transportation Improvement Program, as amended, continues to display financial reasonableness and re-affirms the appropriate project selection criteria whereby all requirements for a Transportation Improvement Program in the Fixing America's Surface Transportation Act are met; and

WHEREAS, this project is consistent with the federal emphasis on performancebased planning and programming, specifically the federal requirements pertaining to transit safety; and WHEREAS, the Interagency Consultation Group has determined that this project is exempt according to the Conformity Rule (40 CFR Parts 51 and 93); and

WHEREAS, the proposed Transportation Improvement Program amendment was presented to the Technical Committee on March 2, 2021.

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approves the attached amendment to the 2021-2024 Transportation Improvement Program for the Baltimore region and finds it to conform to the applicable Maryland State Implementation Plan and requirements of the 1990 Clean Air Act Amendments.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board as the Metropolitan Planning Organization for the Baltimore region approved the aforementioned resolution on March 23, 2021.

3-23-2021	Lynde Esonbers
Date	Lynda Eisenberg, Chair Baltimore Regional Transportation Board



2021 - 2024 Transportation Improvement Program

Metro Subway Track Intrusion Detection and Alert System

TIP ID 40-2103-62 **Year of Operation** 2023

Agency MTA - Transit Project Type Operations Support Equipment

Project Category Transit Preservation Functional Class NA

Conformity Status Exempt Physical Data N/A

CIP or CTP ID(s) 1742 **Est. Total Cost** \$1,216,000

Description:

MDOT MTA will use this FTA Section 5312 Public Transportation Innovation Program discretionary grant to develop, install, and collect information on the effectiveness of a Metro Subway track intrusion system. The track intrusion detection and alert system will build off Metro Subway's existing technology, adding light detection and ranging (LIDAR) scanning devices at five subway station platforms that will communicate with train operators in real-time. The track intrusion detection and alert system will further enhance safety and expedite response time through track intrusion warnings at each platform. Flashing amber LED lights will warn all agency personnel near the track intrusion detection.

MDOT MTA plans to install the system at the following Metro Subway station platforms: Lexington Market, Penn North, Upton, Shot Tower, and Mondawmin.

Justification:

The technology will instantly alert train operators when someone is on the tracks to ensure passenger safety.

Amendment: This amendment adds a new project to the 2021-2024 TIP. MDOT MTA was awarded a Section 5312 Public Transportation Innovation Program discretionary grant from the Federal Transit Administration totaling \$608K. This funding will be used to develop, install, commission and collect information for the effectiveness and lessons learned surrounding a Metro track intrusion system. A total of \$1.216 million is added to the 2021-2024 TIP (\$608k federal/\$608k matching).



Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 6.A Improve System Security -- Provide security-related features at transit facilities or on transit vehicles.
- 6.C Improve System Security -- Apply security-related management and operations techniques.

MTA - Transit

2021 - 2024 Transportation Improvement Program

Transit Preservation

Metro Subway Track Intrusion Detection and Alert System

(Funding in Thousands)

Section 5312 Public Transportation Innovation Discretionary Grant Program - New

Phase	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	FY 2024 Federal Funds	FY 2024 Matching Funds	Total Four-Year Funding Request
CON	\$608	\$608	\$0	\$0	\$0	\$0	\$0	\$0	\$1,216
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$608	\$608	\$0	\$0	\$0	\$0	\$0	\$0	\$1,216
·			1						
Total	\$608	\$608	\$0	\$0	\$0	\$0	\$0	\$0	\$1,216

Page 2 of 2 2021-2024



Larry Hogan Governor Boyd K. Rutherford Lt. Governor Pete K. Rahn Secretary Kevin B. Quinn, Jr. Administrator

TO: MS. HEATHER MURPHY, DIRECTOR

MDOT OFFICE OF PLANNING AND CAPITAL PROGRAMMING

ATTN: MR. TYSON BYRNE, MANAGER

MDOT OFFICE OF PLANNING AND CAPITAL PROGRAMMING

FROM: MS. KATE SYLVESTER, DIRECTOR

MDOT MTA OFFICE OF PLANNING AND CAPITAL PROGRAMMING

DATE: February 8, 2021

SUBJECT: Amendment to the FY 2021-2024 BMC/BRTB TIP

MDOT MTA is requesting an Amendment to the FY 2021-2024 BMC/BRTB TIP. MDOT MTA was awarded a Section 5312 Public Transportation Innovation Program discretionary grant from the Federal Transit Administration totaling \$608K. This funding will be used to develop, install, commission and collect information for the effectiveness and lessons learned surrounding a Metro track intrusion system.

The proposed action will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained.

After your review, please process the requested Amendment for inclusion in the FY 2021-2024 BMC/BRTB TIP. If you have any questions, please do not hesitate to contact Ms. Lara Bachman, MDOT MTA Office of Planning and Capital Programming, at 410-767-3135 or via email at lbachman@mdot.maryland.gov.

cc: Mr. Ian Beam, Regional Planner, Office of Planning & Capital Programming, MDOT Mr. Dan Janousek, Regional Planner, Office of Planning & Capital Programming, MDOT

Track Intrusion Detection and Alert System

TIP ID #	Pending	Year of Operation	Ongoing	
Agency	MTA - Transit	Project Type	Safety	
Project Category	Transit	Functional Class	NA	
Conformity Status	Exempt	Physical Data	NA	
CIP / CTP Page #	1742	Est. Total Cost	\$	1,216,000

Description	Justification
The Track Intrusion Detection and Alert System will build from the Metro	The technology will instantly alert train operators when someone is on the tracks
Subway's existing RWP technology, adding Light Detection and Ranging (LIDAR)	to ensure passenger safety.
scanning devices at five subway station platforms that will directly	
communicate to train operators in real-time. The Track Intrusion Detection and	
Alert system will further enhance safety and expedite response time by	
announcing a track intrusion warning at the platform and flashing amber LED	
lights to warn all agency personnel in the vicinity of the track intrusion	
detection.	

Section 5312 (Public Transportation Innovation Program)

	Pre	Previous Requests Annual Element Federal Funding Requests (\$000)										Project Totals										
	Previou	ıs	Previ	ous	FY202	FY2021 FY2021 FY2022		22	FY2022 FY2023			FY2023 FY202			24	4 FY2024						
	Federa		Matc	hing	Fede	ral	Mate	hing	Feder	al	Matcl	Matching		Federal		Matching		ral	Matc	hing	Estimated	
Phase	Funds		Funds	5	Fund	s	Fund	ls	Funds	;	Funds	nds Funds		Funds		Funds		Funds		Project Total		
CON	\$	-	\$	-	\$	608	\$	608	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,216
ОТН	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
PE	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
PP	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
ROW	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Totals	\$	-	\$	-	\$	608	\$	608	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,216

Funding Source(s) Total

	Previou	ıs Requ	ests	Annual Element				Federal Funding Requests (\$000)											Project Totals	
Totals	\$ -	\$	-	\$ 608	\$	608	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,216